The National Digital Information Infrastructure and Preservation Program (NDIIPP)

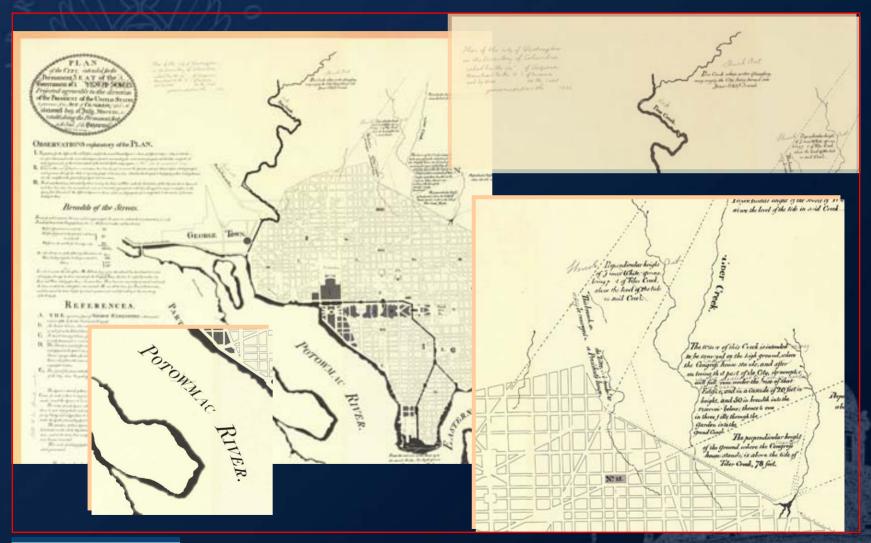
National Digital Strategy Advisory Board

Laura E. Campbell

Associate Librarian for Strategic Initiatives Library of Congress June 28, 2004



Annotated L'Enfant Plan of D.C.





NDIIPP Goal

To develop a nationwide collection and preservation strategy for digital materials in cooperation with the information and technology industry, concerned federal agencies, libraries, research institutions and not-for-profit entities.



NDIIPP Vision

To ensure the long term access to a rich body of digital content through the establishment of a network of partners, collaborating in a digital preservation architecture with defined roles and responsibilities.



NDIIPP Legislation and Funding

- Created by federal legislation (PL 106-554) in December 2000
- Up to \$175 million potentially available
 - \$5 million (available immediately until expended)
 - \$20 million (subject to advance Congressional approval)
 - \$75 million (subject to \$ for \$ match from non-federal sources)
 - \$75 million (private funds)



Listening and Learning Planning Phase, 2001-2002

Consultation with Stakeholders

Background Research

Scenario Planning

Defining Components of the Digital Preservation Infrastructure

Planning Outcomes



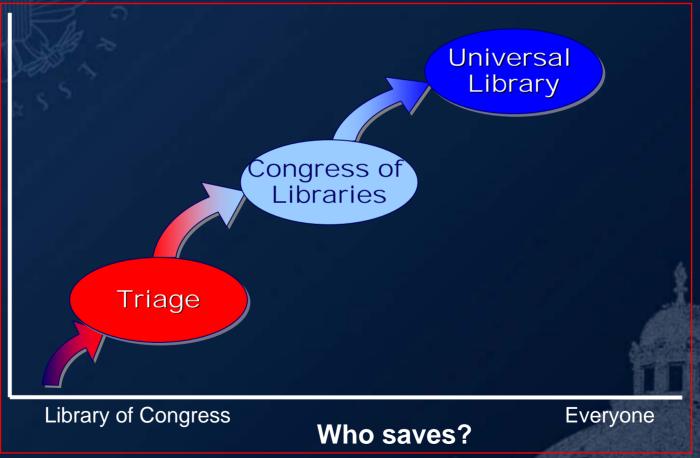
Scenario Planning

Plausible Scenarios

Everything

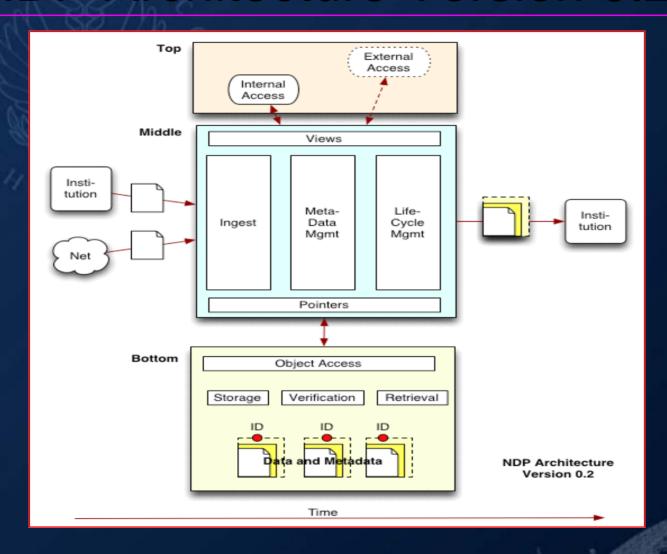
What is Saved?

Most Important





NDP Architecture Version 0.2





Facilitated NSF Workshop

- 15 federal agencies, corporate labs and computer scientists
- Areas of Focus
 - Core technical infrastructure
 - Preservation technologies and tools
 - Access to and use of preserved content
 - Basic computer science issues for large-scale storage systems



Major Lessons

- Distributed and decentralized approach
- Need for research into new tools and technologies
- Recognition that technology is only part of the problem
- Great concern for IP issues
- Need to create a balance between preservation and access
- An infrastructure has two major components:
 - A preservation network of partners
 - A technical architecture



3 Areas of Investment

- Network of partners
- Preservation architecture
- Basic research



Born Digital "At-Risk" Web Sites

- The Commonwealth Fund
- The Middle East Research Institute (MEMRI)
- Terrorism files.org
- Defend America





"At-Risk" Content

- 12 Terabytes
- Selected by curators and subject experts
- Major events
- Specific subject areas
- Material for use by Congress



Acquisitions/Capture Goal

- Web sites
- Web-casts
- e-journals
- TV and radio broadcasts
- Music
- Sound recordings
- Maps



Requires Handling

- Audio
- Text
- Databases
- Video
- Still and moving images
- Graphics
- Geo-spatial materials



Partnerships

- First NDIIPP Solicitation for Partners
- 22 eligible proposals
- Lead Institution with at least 1 other partner
- 2 peer review panels
- 8 recommended



8 Projects with 25 Participating Institutions

- Universities
- State governments
- Private companies
- TV broadcasters
- Law firms
- Non-profit archival organizations



Diverse and Challenging Content

- Social science data sets
- News broadcasting
- Geo-spatial material
- TV programming
- Business records
- Government and political web sites
- Historical multimedial collections



- Business history for the 1990s, including business plans, e-mail correspondence, records of a law firm
- U.S. Southern history and culture, including Civil War, Civil Rights, business, and church histories
- State and local government activities, community organizations, political campaign literature, state and national labor history (CA, AZ, NY), the California gubernatorial recall election, and an archive of web sites of former federal agencies



- LANDSAT imagery and other digital data; digitized historical map collection; federal and state agency geo-spatial data
- Social science data relevant to health care, demography, and the environment, including: respondent level survey data; qualitative data (interview transcripts), and federal data



- Heterogeneous materials as a testbed: digitized audio recordings, digital aerial photographs, digitized local public radio and television programs, digitized scientific and technical proposals
- International broadcast television journalism, including Middle East, China, Japan, Mexico, Chile, and Russia among others



- Public broadcasting programming and program elements from partnering organizations in the U.S.
- Geo-spatial data at the state, county, and municipal levels capable of supporting studies in public health, transportation, economic development, and demography



3 Year Period of Performance

- Content selection and collection
- IP issues
- Content transfer and retention
- Costs



International Partnerships

- Digital Preservation Coalition in the UK
- International Internet Preservation Consortium (IIPC)
 - 12 national libraries
 - Technical specifications for an open source web crawler
 - 5 working groups



International Internet Preservation Consortium (IIPC)

- France
- Italy
- Denmark
- Finland
- Iceland
- Canada

- Norway
- Australia
- Sweden
- United Kingdom
- Internet Archive, USA
- Library of Congress, USA



Business Model Partnerships

- Service bureau for archiving foreign news broadcasts
- Subscription and archiving service for e-journals
- Service provider for long-term archiving of large volume multimedial content



Technical Partnerships

- Repository development with NASA/Langley for video materials
- Prototyping development with Los Alamos National Lab for:
 - e-journals
 - Web sites materials, and
 - Multimedial collections



Next Round of Partnerships 2005

- State and local government content
- Corporate technology and computer science laboratories



Preservation Architecture

- In 2003, conducted a series of workshops with 47 technical experts
- Revised NDIIPP architecture
- Developed an archiving test of existing architectures



Goals of the Archive Ingest and Handling Test (AIHT)

- 4 institutions and 6 existing architectures
- Test of ingest, export, and transfer among architectures
- Identify gaps in functionality
- Focus on protocols and metadata investments



The National Science Foundation (NSF) Call for Research Goals

- Technical Architectures for Archival Repositories
- Attributes of Archival Collections
- Digital Archiving Tools and Technologies
- Organizational, Economic, and Policy Issues



5 Year Outcome

- Distributed network of collecting and preserving partners
- Up to 100 terabytes of "at risk" content
- Topics include: American Law, Domestic Social Policy, Foreign Affairs, Defense and Trade, Government and Finance, Science and Technology
- Variety of formats: text, numeric, video, images, audio, and geo-spatial



5 Year Outcome

- Multiple sources: TV and radio broadcasts, electronic journals, private archives, donations and the Web
- Preservation standards for digital content
- Governing body for NDIIPP
- Recommendations to Congress for future funding and legal options for NDIIPP



Digital Universe

